

(1994) J. Exp. Med. 180:1087-1096 (Wright et al.). The Office has also rejected claims 10-16, 36, 38, 42 and 44 under 35 U.S.C. § 103(a) as being unpatentable over Wright et al. in view of U.S. Patent 5,047,335 (hereafter, Paulson et al.) and art disclosed in the specification. The Office contends that Wright et al.

teach a composition comprising a human IgG1 antibody wherein said antibody has at least one Ig CH2 domain "containing" G-2 (e.g. G-2 plus two additional Man α 1) wherein said antibody is free of G2, G1, G0 or G-1 oligosaccharides (see Fig 1 and abstract).

Applicants respectfully disagree and request reconsideration in view of the following.

Wright et al. describe the production of chimeric mouse-human IgG1 antibodies in a mutant chinese hamster ovary (CHO) cell line deficient in N-acetyl glucosaminyltransferase I activity (Lec 1). Lec 1 synthesizes oligomannosyl structures not normally found on IgG such as the structure shown at Figure 1 B. (Wright et al., page 1088).

Applicants claims 10-16, 38, 42 and 44 delineate compositions containing G-2 oligosaccharide structures. Art recognized G-2 oligosaccharide structures are described at, for example, page 14 of the specification. The structures produced by the mutant cell line described by Wright et al. in Figure 1 B are not G-2 oligosaccharides nor would they be recognized as G-2 oligosaccharides containing additional sugars. Further, the office's position that the structure described by Wright et al. and produced by the Lec 1 cell could be considered a G-2 oligosaccharide containing additional mannose residues is scientifically unsound and an unreasonable construction of the claim. The Examiner's attention is drawn to Dwek et al., (1995) J. Anat. 187:279-292, especially Figure 4 and the accompanying text at pages 282-284 (a copy of Dwek et al. which is provided for convenience). A "G-2 oligosaccharide plus two additional Man α 1" would not be considered a G-2 oligosaccharide "containing" two additional Man α 1 residues such as construction is contrary to the accepted oligosaccharide nomenclature (i.e., a "G-2 oligosaccharide plus two additional Man α 1" is no longer a G-2 oligosaccharide). The Examiner's

attention is further drawn to the specification at page 14 which describes the G-2 structure. If any additional sugar residues were added to the G-2 structure it would no longer be a G-2 oligosaccharide. The naming of oligosaccharides is not analogous to a polypeptide comprising or containing an additional amino acid.

In view of the foregoing, reconsideration and withdrawal of the pending rejection of the claims under 35 U.S.C. 102(b) and 103(a) is respectfully requested.

CONCLUSION

Applicant respectfully requests that the foregoing remarks be considered and entered in the file history of the above-identified application. It is submitted that all grounds for rejection have been removed and the claims are now in condition for allowance. It is therefore earnestly solicited that such a final favorable disposition is made. The Examiner is invited to telephone Jeffrey S. Kubinec, Esq. (Reg. No. 36,575) at (650) 225-8228 if deemed helpful to clarify and advance prosecution.

Respectfully submitted,
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